AMENDMENTS TO THE ABSTRACT

Embodiments of the present invention describe a [[~~A~~]] system and method for microprocessor power regulation. ~~The present invention provides an~~ An appropriate amount of voltage is provided to a microprocessor based on a voltage identifier (VID) received by a voltage controller from the microprocessor via a serial communication line. A voltage identifier clock signal (VIDClock) is used for the timing of transmission and receipt of data/acknowledgement signals. A guard clock signal (VIDGuard) is provided via a separate guard clock line to prevent potential noise on the clock line from causing a clock signal misidentification, which could cause a wrong value to be received as the VID. VIDGuard is analyzed in relation to VIDClock to verify the value of the clock signal. To verify receipt of the VID data, a voltage identifier acknowledgement line (VIDAck) is transmitted from the voltage regulator to the microprocessor. The acknowledgement signal is checked by a two-part receipt verification, high-to-low and low-to-high.